

VISIT...

LANZAROTE
Caliente.COM

BOOK 8



Tommy and the Giant Cockroach



Tommy Tales

Guide for Teachers and Parents

Book 8: *Tommy and the Giant Cockroach*

This is the eighth in the *Ewe Books* series of illustrated books available on the **Learning Page** Web site for downloading and printing FREE of charge. A new book in this series will be "published" every month.

The books are written to a second or third grade reading level, but pre-kindergarten to first graders will also love having the stories read to them.

Introduction

If possible, make enough copies of the book for each member of the class or group. See Book 1, *The School Lunch Room*, pages 2 and 3 of the Teacher's Guide for directions on how to make the book. If you download and copy the pages in advance, the students can assemble the pages and tape or staple them together. Before starting the reading, have students color the covers of the books in any way they choose. While coloring, initiate a discussion on what the title could mean.

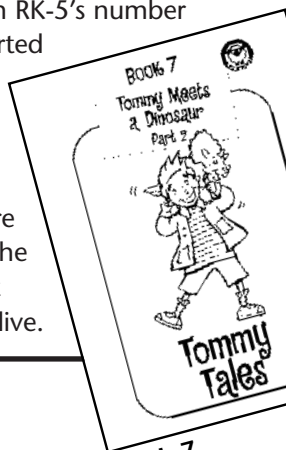
Before starting to read *Tommy and the Giant Cockroach*, share with the class that this book is another in a series and that this story is part of a much longer one.

Planning with Ewe Books

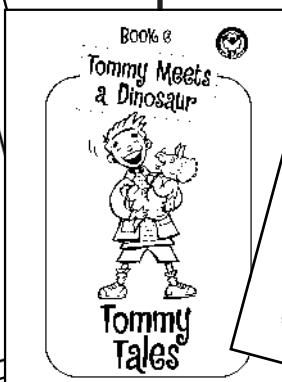
As you are beginning your planning for the year, depend on the Learning Page and this delightful serial story to add variety and fun to your reading routines. One new book a month, and all accompanying teachers' materials and **Fun Sheets**, supplement your other classroom activities and curricula.

THE STORY SO FAR . . .

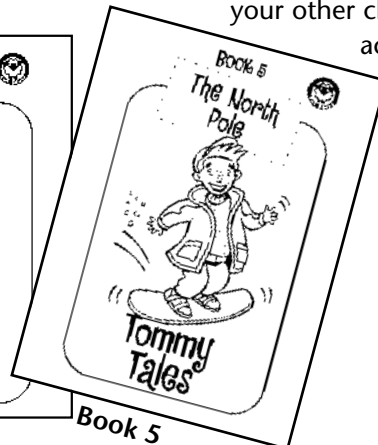
Tommy, his sister Sam, their friends, Taffy the dog, and Bongo the monkey go on adventures using the magic powers of RK-5, their robot friend from outer space. By punching numbers on RK-5's number pad, everyone is transported to places such as the animal shelter, the zoo, the North Pole, and back in time to see real dinosaurs. Each adventure happens in response to the children's curiosity about the world in which they live.



Book 7



Book 6



Book 5

Preparing for Reading

Before the first reading of the story, ask students to share experiences with insects and spiders. (Almost everyone has something to say on this topic!) Tell them you are going to be reading a story about Tommy and his friends and their adventure in the world of insects.

After the first reading, ask for reactions to the story. Is this adventure with insects like anything that has ever happened to you? Have you ever been frightened by an insect or spider? Would you say that this story is based on reality or fantasy? Which events could be real and which ones could be made up?

Reading Guide

You may structure the reading time for this story in many ways.

1. You could read it aloud, all the way through, with the entire class on the rug during your regular story time. Then, review the story spread by spread and begin implementing the various objectives and **Fun Sheets**.
2. After reading aloud the first two pages, you could stop and begin questioning for comprehension and work on some of the **Fun Sheets** and **activities** cited in this section. Proceed to the second two pages, etc.
3. After reading all the way through, go around the class or group and have each student read a page, noting any difficult words to work on later.

Opening Lesson

Introduce the book by showing the cover and saying the title clearly: *Tommy and the Giant Cockroach*. You could also write it on the board. Read the first two pages of the story, then discuss the following questions.

1. What are some key elements that students remember about the previous stories? (*The School Lunch Room*, *The Animal Shelter*, *Bongo Gets Adopted*, *A Visit to the Zoo*, *The North Pole*, *Tommy Meets a Dinosaur*, and *Tommy Meets a Dinosaur, Part 2*)
2. Ask students what they can predict about the story from what you have read on these first two pages. Write their ideas on the board.

2

Tommy and his friends were playing at the park. A pretty butterfly flew by. It was red and black.

"That's a monarch butterfly," said Kim.

"How do you know?" asked Andy.

"We're studying insects at school," answered Kim. "Did you know that spiders are not insects?" she added.



learningpage.com resources ★

Several areas of the website will be useful to the study of this story and an **Insects/Spiders Unit**.

1. **The Insects/Spiders Unit** featuring over 300 **Fun Sheets**, **Fact Files**, **Cut Outs**, a **Mural**, and an **extensive book list**. **Fun Sheets** are in the areas of math, science, language arts, and fundamental skills.
2. **Insects/Spiders Lesson Plans**. **40 activities**: individual insect studies, anatomy, classification, life cycles, finding and collecting, art, camouflage, and how to set up a Learning Center.
3. **Tommy and the Giant Cockroach**: **20 Fun Sheets** designed to be used with the story, along with this teacher's guide.

Combine all of these materials for a comprehensive and exciting **Insects/Spiders Unit**!

<http://www.learningpage.com>

"Yukk, I don't like bugs," said Sam.

"They are creepy crawlies!"

"Oh no they are not.

And you shouldn't call them 'bugs'.

Bugs are just one kind of insect.

Most insects do good things," said Kim.

"Tommy, could you ask RK-5 to take us to a place to see insects?" asked Kim.

"I'll ask him. He's on the bench with Bongo," said Tommy.

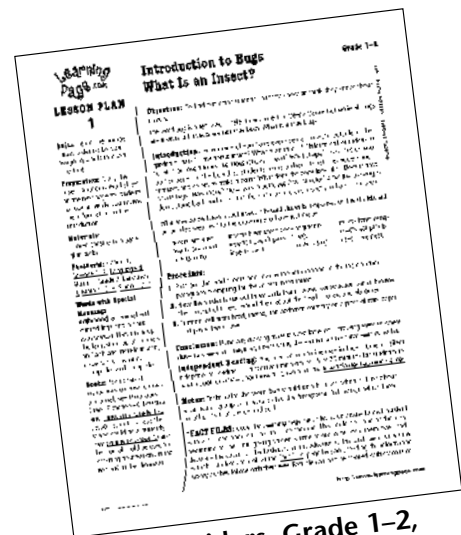


Create a Simple Chart

Use **Insects/Spiders, Grade 1–2, Lesson Plan 001** to teach students what defines an insect, and **Insects/Spiders, Grade PreSchool–K, Lesson Plan 005** to determine why spiders are not insects (and for fun spider activities). Organize the anatomical features of insects and spiders as a chart.

Example:

Feature	Insects	Spiders
legs	6	8
body segments	3	2
antennae?	yes	no
wings?	yes	no

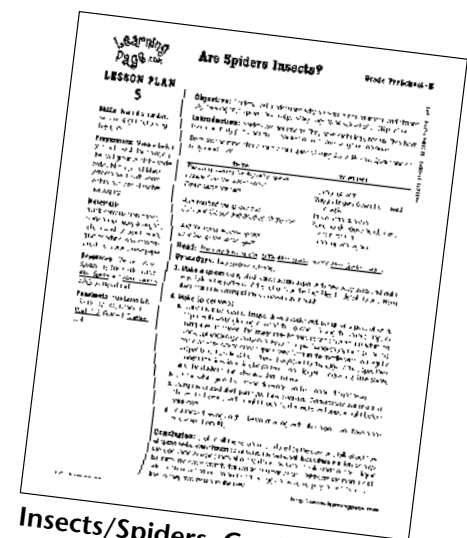


**Insects/Spiders, Grade 1–2,
Lesson Plan 001**

Readers' A to Zs

There are many opportunities in the book for readers to practice letters. As the title of the book contains the word *cockroach*, practice learning and writing insect names that begin with the letter *c* (*cricket, cicada, cecropia moth, caterpillar, checkered beetle, cucumber beetle, click beetle, clearwing, carpenter ant*). Students also can try to think of (or find by referring to **Insect/Spider Fact Sheets** or a library book) an insect or spider that begins with each letter of the alphabet (*ant, black widow spider, cricket, dragonfly, earwig, flea, grasshopper, honey bee, imperial moth, june beetle, katydid, ladybug, mosquito, net-wing beetle, oak lace bug, praying mantis, question mark butterfly, rose weevil, stink bug, tarantula, underwing, velvet ant, wasp, Xysticus* [scientific name for crab spider], *yellow jacket, zebra butterfly*). Encourage students to come up with more than one insect or spider for each letter. (Warning: They will likely have trouble with *q, u, x*, and *z*!)

<http://www.learningpage.com>



**Insects/Spiders, Grade
PreSchool–K, Lesson Plan 005**

Comprehension

There are several **Fun Sheets** with questioning strategies to aid students' understanding of *Tommy and the Giant Cockroach*.

Fun Sheets 001 and **019** will get students started on testing their comprehension of the story. After assessing their answers, reread the story as needed to clarify what students don't understand.

Fun Sheet 001

Name _____

Read the questions and circle the correct answer.

1. What kind of butterfly did Tommy and his friends see at the park?
viceroys zebra monarch swallowtail
2. Who first asked to go to a place to see insects?
Kim Bongo Lucy Tommy
3. Kim started to scream because a giant _____ was walking toward everyone.
ant caterpillar ladybug spider
4. What did Tommy and Sam see?
caterpillar fly cockroach
5. Corky grabbed Tommy with his _____.
mouth front legs back legs
6. Who rescued Tommy from Sam?
RK-5 Taffy

Fun Sheet 019

Name _____

True or False?
Decide whether the following statements are true or false, then circle the correct answer.

1. RK-5 was sitting on the bench with Bongo. true false
2. Spiders are insects. true false
3. RK-5 made everyone huge. true false
4. The spider's name was Sarah. true false
5. The children were warned to stay clear of Corky. true false
6. The caterpillars were friendly. true false
7. Sam fell off the caterpillar, and Tommy won the race. true false
8. Corky used his mouth to grab Tommy. true false
9. Taffy saved Tommy from Corky. true false
10. RK-5 promised never to make the children small again. true false



"Kim is interested in insects," said Tommy to RK-5. "Could you please take us to a place where we can study insects?"

"Of course I can. I can take you anywhere. I can even talk to insects," said RK-5.

RK-5 told Tommy which buttons to press on his number pad. Tommy pressed the buttons. There was a flash of light and a cloud of blue smoke.

Predicting Outcome

After reading pages 4 and 5, or after every few pages of your choice, check with students and ask them to predict what will happen next. Remind them of their previous knowledge and what they learned from the book before this one. Construct a simple chart like the one at left, as an ongoing record. Students can record their predictions and then check back after further reading to compare their predictions with the actual story.

Questioning Strategies:

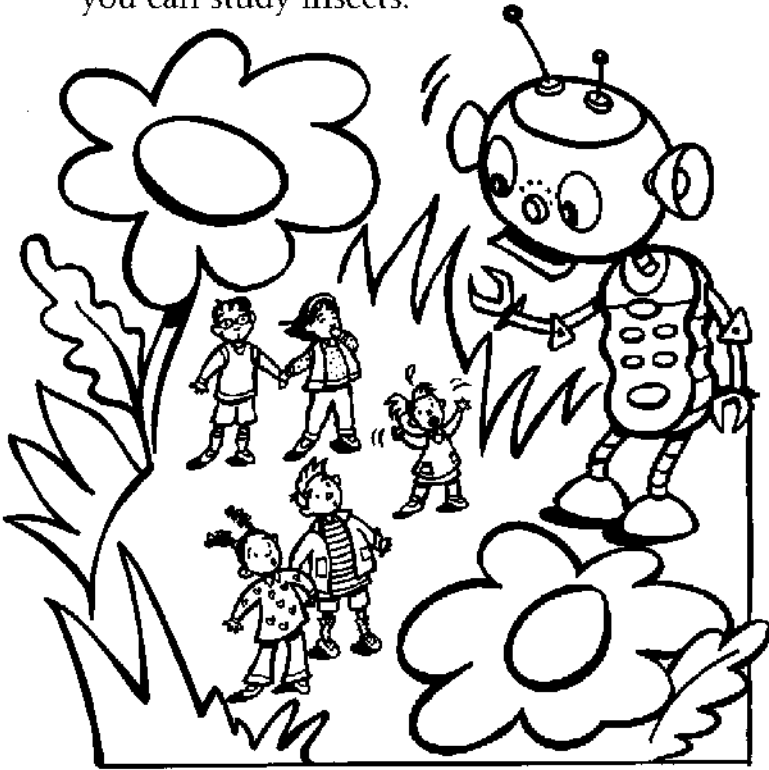
- What has happened so far in the story?
- Compare the story up to page 7 with your predictions from page 2.

I predict this will happen	This is what really happened

When the smoke cleared, Sam started to shout.

"What's happened? RK-5 has made everything huge!" she yelled.

"No, I haven't made everything huge," said RK-5. "I've made all of you small, so that you can study insects."



Learning Page Fun Sheets

Use the **Learning Page Fun Sheets** throughout the month between the introduction of new titles in the series, to expand on the teaching opportunities of the story.

There are **Fun Sheets** questioning comprehension, sequencing tasks, a word scramble, and matching word columns. There are lists of words used in the story to teach and strengthen spelling, consonant blends, synonyms and antonyms, and parts of speech.

There are also over 300 Learning Page Lesson Plans and Fun Sheets featuring the Insects/Spiders theme. Browse the site to find interesting activities targeting math, science, and language arts skills at the Kindergarten and grades 1, 2, and 3 levels, and fundamental skills at the preschool level.

Previous Reading

This story can be a part of an extended **Insects/Spiders Unit**. After the first reading of *Tommy and the Giant Cockroach*, ask students to name other books they have read about insects and spiders. If you have a Learning Center set up to support your **Insects/Spiders Unit**, be sure to stock it with plenty of the books listed on the Learning Page's extensive book list (go to **Insects/Spiders**, then **Recommended Reading**).

Fun with Size

"What's happened? RK-5 has made everything huge!" she yelled.

"No, I haven't made everything huge," said RK-5. "I've made all of you small, so that you can study insects."

Use this concept as inspiration for sharing about size. When do students feel big, and when do they feel small? How does it feel to be big? (Examples: when looking at an ant hill, a pet hamster, or a baby sister or brother) How does it feel to be small? (Examples: with adults, looking up at a skyscraper, or in the presence of a giraffe or elephant at the zoo)

I feel big when:

I feel small when:

Have students create a list of experiences when they've felt big and small. Talk with them about how everyone (adults included) has times of feeling big and times of feeling small.

Extension You can use this idea to lead into a discussion about feeling strong and feeling vulnerable. Let students know that both kinds of feelings are healthy and good.

Words to Watch

Here are some words from the story that may be new or unfamiliar to students, or that might present a spelling challenge. Use them for a spelling or vocabulary list to be tested at the end of the week that you introduce the story.

1. monarch (p. 2)
2. butterfly (p. 2)
3. anywhere (p. 4)
4. another (p. 6)
5. suddenly (p. 6)
6. curious (p. 7)
7. cockroach (p. 8)
8. caterpillars (p. 8)
9. sticky (p. 13)
10. threads (p. 13)



Write the words on the board, and have students copy them onto a piece of paper. Then, using dictionaries or on line, have them write a definition for each word. Remind students to re-read the sentences where the words appear in the story to make sure they choose and write the correct definition.

At a later time, have students read the definitions they chose for each word. Then have them write a sentence using each word.

Where to See Nature

Tommy wants to see insects at a museum or a zoo instead of outdoors. Why might he prefer that? Use this idea to initiate a discussion about what can be seen at a museum, a zoo, and in the wild. Where have students seen the most wildlife? Where have they had the most exciting adventures? What are the advantages of going to each place, and what can best be learned at each of them? Some factors you might include in your discussion are:

- where to learn about animals that live in your local area
- where to see exotic species
- where to see and learn about endangered animals
- where to learn about how animals are related to each other
- where to go if you want to have a safe experience versus a more unpredictable adventure
- where to go if you want to stay clean (or get dirty!)

6

"Oh no!" said Tommy. "We didn't want to become small. We wanted to see insects at a museum or a zoo. Can you make us big again?" asked Tommy.

"Not for another hour," answered RK-5.

Suddenly, Kim started screaming.

A big spider was walking towards them.



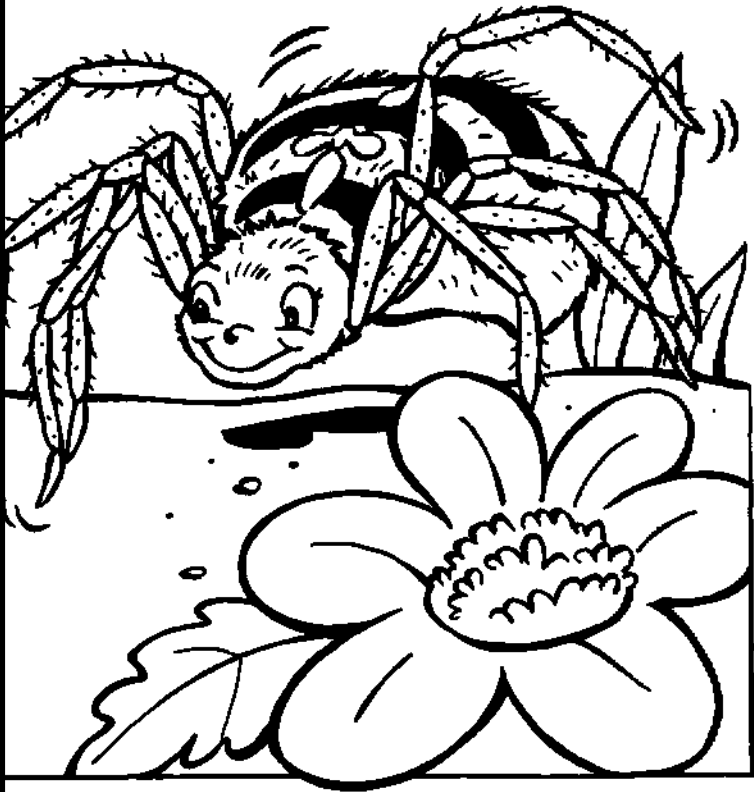
Using the Illustrations

Enlarge copies of several story illustrations without the text. Ask students to choose their favorite and do one of the following:

- a. Write a short paragraph describing what is happening in the picture. This could be dictated to the teacher or handwritten by the student.
- b. Draw a picture of what could happen next, something different from the actual outcome of the story.
- c. Write a caption for several of the illustrations, based on actual events in the story. Explain that a caption is a short, explanatory comment accompanying an illustration.
- d. Look at an illustration and pretend that it is part of a different story, one that the student imagines. Write a caption based on this imagined story. A single picture can suggest many different stories. For example, in the picture on page 7, the spider might be smiling because she is happy to have found five tasty morsels for lunch.

RK-5 spoke to the spider.
He told them not to worry.

"The spider is friendly but curious. Her name is Sandra. She wants to know why you are here," said RK-5. "I told her you were studying insects."



Numbers in Nature

A spider has eight legs. Poison ivy has three leaves. One of the ways we identify things in nature is by number.

Have students write the numbers 1 through 10 on a piece of paper and see if they can come up with at least one thing in nature for each number.

1	_____
2	nostrils
3	_____
4	_____
5	_____
6	insect legs
7	_____
8	spider legs
9	_____
10	_____

Ask students to share their answers with their classmates. Use this exercise as an opportunity to teach students nature facts they may not have thought of or known. Some ideas for each number are:

- 1 water spout on a dolphin, Earth's moon, trunk of an elephant
- 2 nostrils, legs on a bird, pincers on a lobster, antennae on a butterfly
- 3 poison ivy leaves, stars in the belt of the Orion constellation
- 4 legs on a salamander, wings on a moth, chambers in a human heart, stomachs in a cow
- 5 arms on a starfish, fingers on a human hand
- 6 legs on an insect
- 7 number of continents on Earth
- 8 legs on a spider, tentacles on an octopus, kinds of sea turtles
- 9 number of planets in our solar system
- 10 toes on a baby

Planning

One way to plan reading these books about Tommy and his friends and also track your students' progress is to make a large wall chart. List the titles and dates of beginning each book across the chart, and the students' names in the down column.

	John Smith	Margie Jones	Sue Peters	Tim Moore	Maria Eyles	Andy Ganes	Jimmy Chan	Peter Liu
The School Lunch Room	8-2	9-7	9-5	9-8	9-11	9-13	9-18	
The Animal Shelter	8-10	9-12	9-14	9-17	9-21	9-23		
Bongo Gets Adopted	10-1	10-2	10-5	10-7	10-8	10-9		
A Visit to the Zoo	11-4	11-4	11-4	11-4	11-4			
The North Pole	12-3	12-3	12-3	12-3				
Tommy Meets a Dinosaur	1-14	1-14	1-17	1-21				
Tommy/Dinosaur, Part 2	2-10	2-13	2-16					
Tommy/Giant Cockroach	3-8	3-9						

Insects/Spiders Mural

Download and put together the **Insects/Spiders Mural** as explained in the **Learning Page Teachers Notes**. Students can help with putting the pages together like a puzzle. For a longer mural, print out multiple sets of the mural and attach in a strip (the illustration joins as a continuous image). The mural is a woodland nature scene with a pond and various types of trees, vines, flowers, and fungi.

Use the Insects/Spiders cut outs as patterns to create stand-up versions of the spider and insects to place on the mural. Stand-up figures for Tommy and his friends can be created by downloading each character's cut out, pasting it onto cardboard or oaktag, then cutting on the dotted line. Assemble as shown below; an extra strip will be needed to enable each figure to stand. Velcro fasteners can be used instead if the mural is on the wall. See diagrams below and at right.

Mural Project: Camouflage

Camouflage is a natural adaptation of color and pattern that enables animals to hide from their enemies by blending into their surroundings. Camouflage also makes animals less conspicuous when hunting for food. Use the **Insects/Spiders, Grade 1–2, Lesson Plan 008, Hide and Seek!** to introduce students to the idea of camouflage. They will color the mural and then color insect and spider cut outs appropriately to blend into the background for decreased visibility.

Extension Some poisonous insects have no need to hide and are brightly colored—the exact opposite of camouflage. Their display of warning colors scares off predators. Some harmless insects mimic color patterns of poisonous ones in order to take advantage of the fact that predators will avoid them.

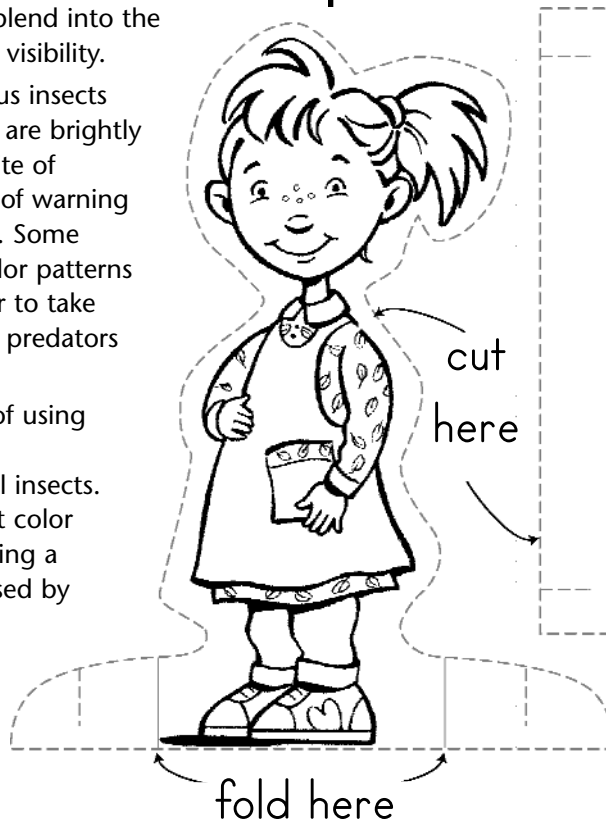
Give students the option of using warning colors instead of camouflage for their mural insects. This will teach them about color contrast as well as illustrating a unique survival strategy used by some insects.

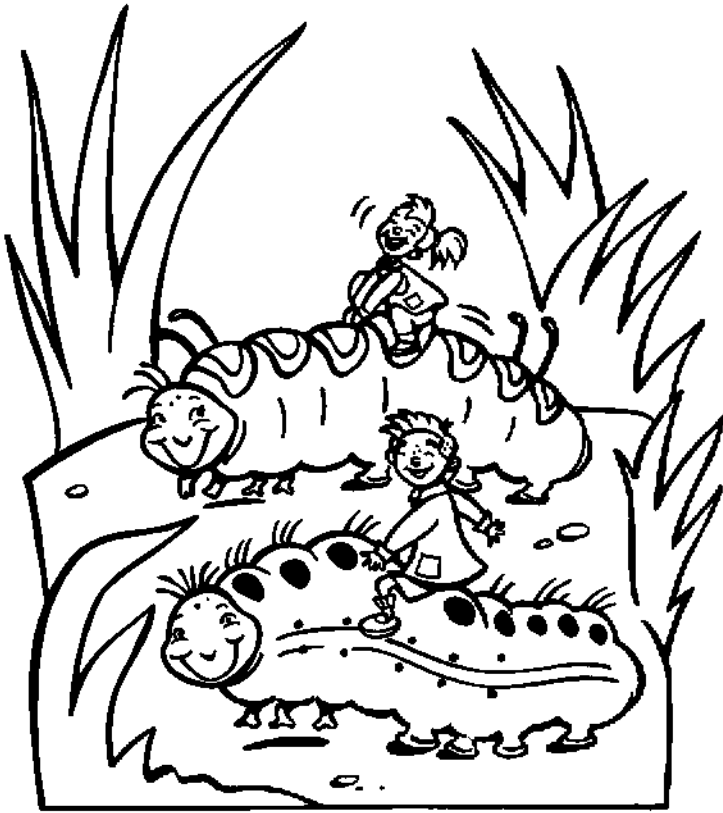
8

"I'm scared," said Kim.

"Don't be afraid. Sandra said that most of the insects will not hurt you. There is one bad insect — Corky, the cockroach! You should stay clear of him. He's a bully," said RK-5.

Two pretty caterpillars walked by. One was green and red. The other was black and yellow. The caterpillars smiled at the children and waved.





"The caterpillars asked if you want to ride on them," said RK-5.

Tommy jumped on the green and red caterpillar and Sam jumped on the other. "I think they want to race," yelled Tommy.

Midway Comprehension Check Pages 8–9

- How did RK-5 change the friends, and why did he change them?
- Was everyone happy about the adventure they were on?
- Why was Kim screaming?
- Were the children in real danger when Kim started screaming?
- Which insect were the children warned to avoid?
- Why were the children not afraid of the giant caterpillars?

Learning about Metamorphosis

The process of metamorphosis that butterflies and moths undergo is one of the most fascinating occurrences in nature and one that fascinates young students. The **Insects/ Spiders, Grade 1–2, Lesson Plan 008** on Life Cycles is an art activity geared toward teaching students about the stages of metamorphosis. Refer to Recommended Reading on the Web site for numerous stories about metamorphosis.

Fun Sheet 017 for *Tommy and the Giant Cockroach* tests students' understanding of the stages of metamorphosis.

You can also use the topic of metamorphosis to explore more broadly the topic of change and transformation in nature. Your discussion might include such things as how seeds germinate, how bodies mature, and how the weather changes.



Making New Words

Fun Sheet 005 is a word activity for students to practice recognizing letters and letter combinations. Before starting to write, review how insects and spiders are the same and how they are different.



Comparing Groups

Teaching students about the differences between insects and spiders is an opportunity to introduce the larger topic of how living things are related to each other. You can begin with a general discussion that stimulates students' powers of observation. You might cover these topics:

- how animals and plants are different
- what animals have in common with each other
- what plants have in common with each other

Your discussion might include body structure, locomotion, feeding, and protection.

To explore taxonomy more in depth, encourage students to look at divisions within the animal kingdom by comparing body types of these groups:

Mollusks (snails, clams, and more)

Arthropods (insects, spiders, and more)

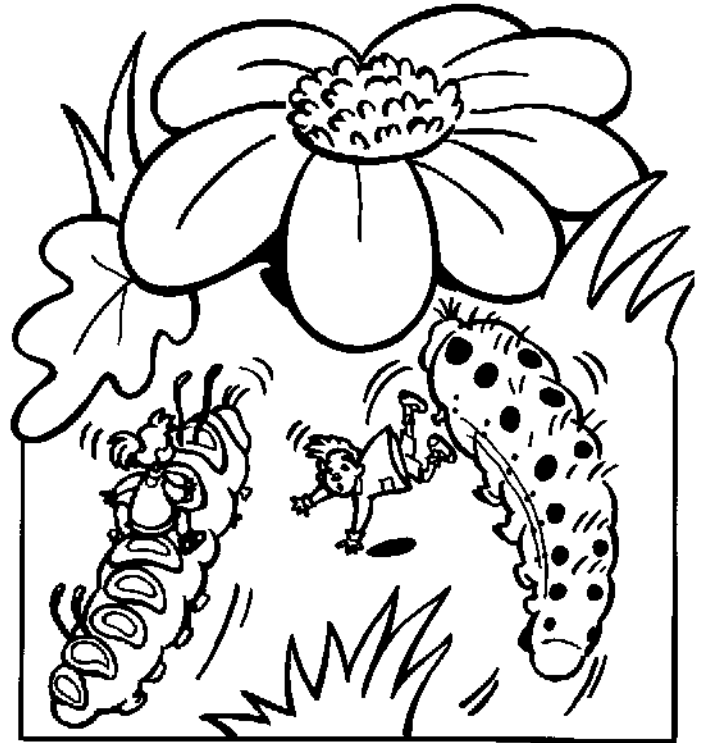
Chordates (amphibians, reptiles, fish, birds, and mammals)

Students wishing to learn more can explore differences within the five Chordate groups.

10

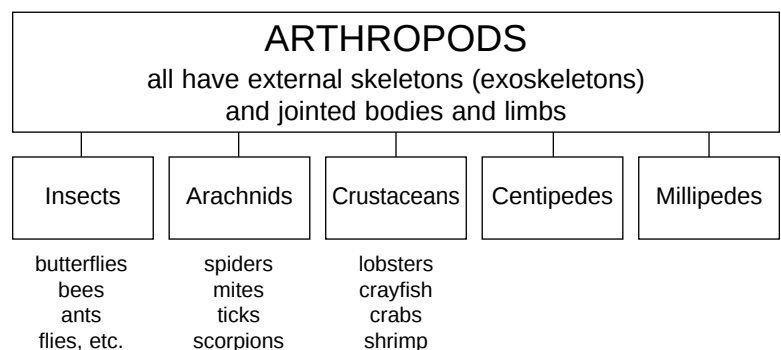
"First to reach that big daisy is the winner," said Andy. "Ready, set, go!"

The caterpillars quickly headed for the daisy. Tommy's caterpillar ran faster, but Tommy fell off. The other caterpillar went more slowly. She was second to reach the daisy, but Sam was still on her back.



Insects and Their Relatives

Students may express interest in learning more about other animals that are closely related to insects and spiders. Below is a simplified chart that includes some terms students might come across in their reading on insects and spiders.





Everyone laughed at Tommy. He was sitting in the long grass. They all stopped laughing when they saw something move behind him. It was Corky the cockroach.

Insects/Spiders Inventory

Use the **Insects/Spiders Inventory Sheet** (Insects/Spiders, Grade 1–2, Lesson Plan 010A) to keep a record of the insects and spiders you have read about in this story and others you have read about in the **Insects/Spiders Unit**.

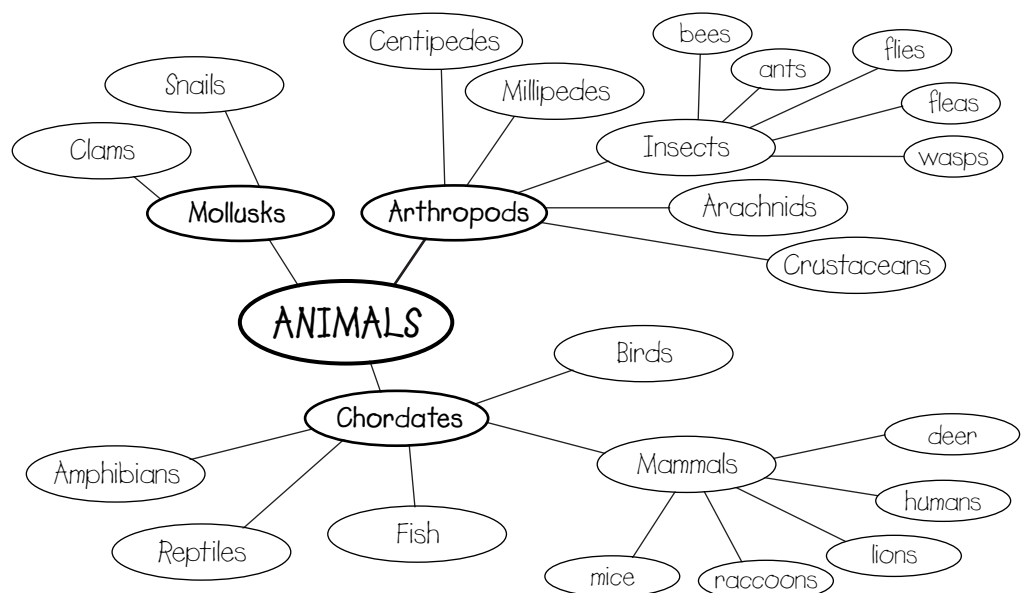
You can also use the Inventory Sheet in conjunction with the **Looking for Insects (Field Trip) Lesson Plan** (Insects/Spiders, Grade 1–2, Lesson Plan 002) to record insects and spiders seen on a field trip.

Other related activities include:

- asking each student to tell their most memorable story about an insect or spider encounter. Then have students choose roles and act out some of these stories.
- a dramatic presentation where each student plays the part of an insect or spider. Have each student choose the creature he or she wishes to play and think of details such as voice quality, sound effects, and body movements. If students have enough planning time, they might also dress wearing realistic colors and add facial makeup, nail polish, and accessories such as antennae made from pipe cleaners.
- asking students to choose an insect or spider that interests them. Suggest that they research their chosen creature at a library or on the Web and present their findings to the rest of the class. Students might include information such as body type, food, lifestyle, and environment.

Classifying as a Web Diagram

The information on taxonomy can be organized in many ways. Show students how to construct a web diagram with the center being **Animals**. Ask them to organize the information using the animal groups introduced here and examples of each. (There are many additional animal groups, but students are unlikely to be familiar with most of them.)

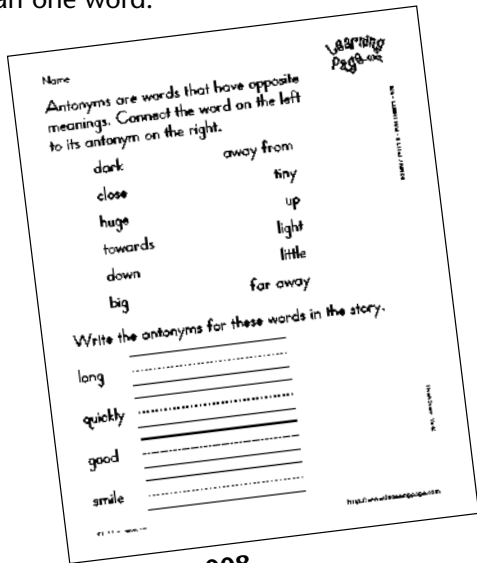


Antonyms

Students may practice recognizing and naming antonyms by using **Fun Sheet 008**. Seeing the words in context leads to better understanding of how the words are used.

good	p. 3	smile	p. 8
huge	p. 5	long	p. 11
towards	p. 6	up	p. 13
big	p. 6	quickly	p. 14

Remember, in writing, antonyms can be more than one word.



Fun Sheet 008

Extension As an extra challenge, after students have located the words in the story, have them read the text on this page. Ask them to look for words that could have antonyms (*everyone, began, yelling, walk, behind, you, late, catch, towards*). Then, have them rewrite the paragraphs substituting antonyms for those words. Read the paragraphs in front of the class and reinforce how antonyms completely change the meaning of the story.

Extension There are many ways to play with the concept of opposites. Have students experiment with one or more of the following:

- using their opposite hand to eat, throw a ball, write, or tie their shoes
- role playing that they are the opposite gender
- role playing (briefly!) that they are adults and that adults are children

Explain that trying out new patterns and points of view can teach them about how other people live and experience the world.

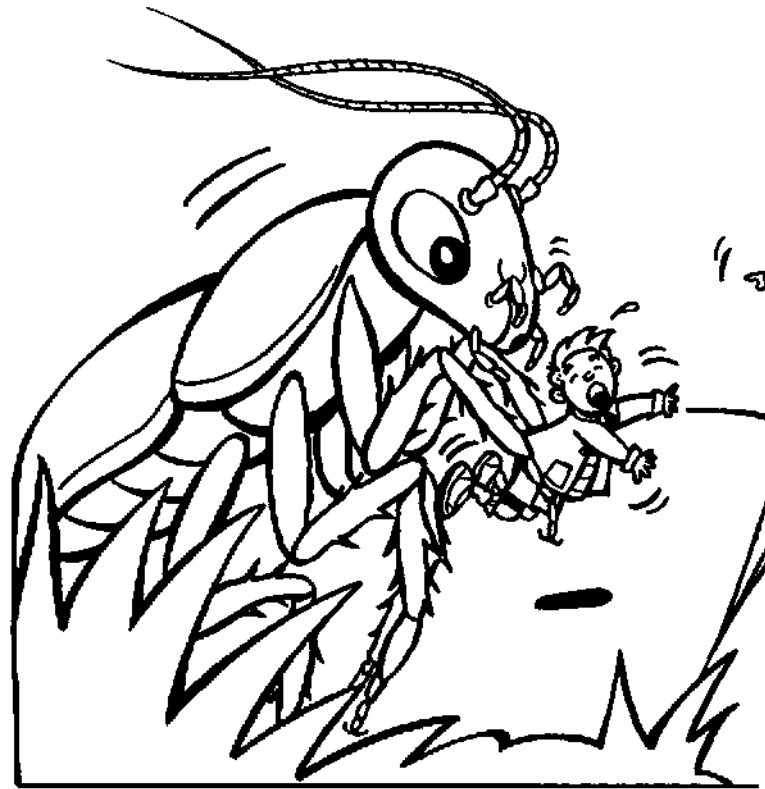
12

Everyone began yelling. "Run! Run! Corky the cockroach is behind you!"

Tommy got to his feet. It was too late.

Corky grabbed Tommy with his front legs.

Corky saw the other children. He wanted to catch them too. He ran towards them.



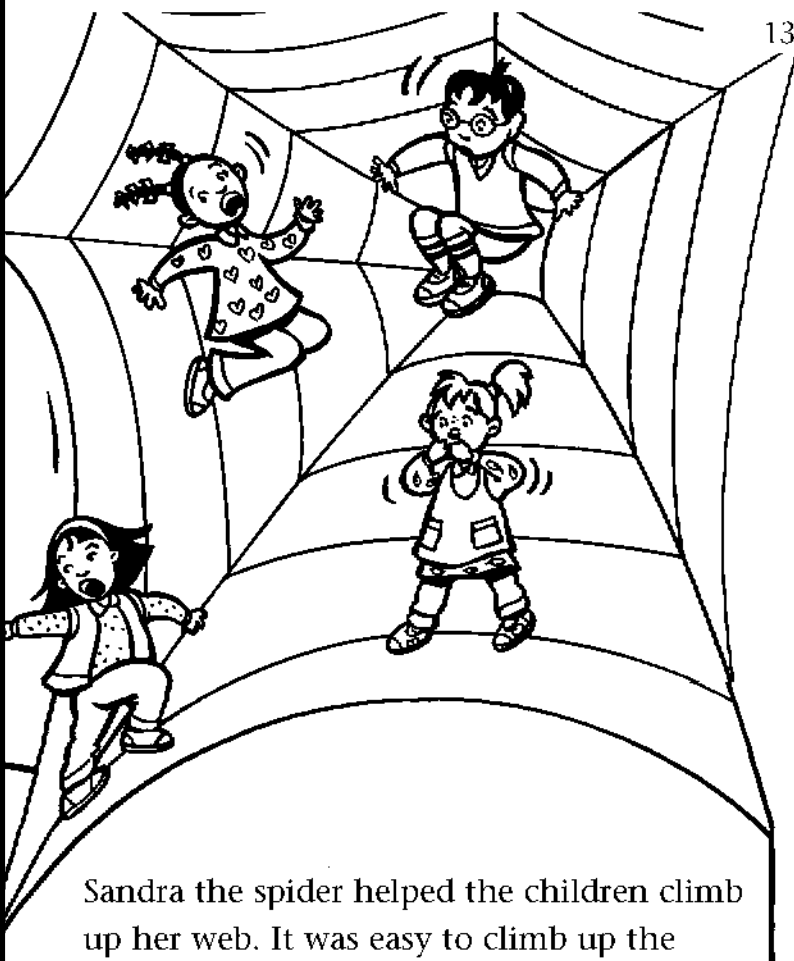
Talking with Animals

RK-5 says he can speak any language and can even talk with insects. How many students have ever talked with an animal?

Ask students whether they talk to their pets. What do their pets seem to understand? Do they understand more than simple commands they have been taught? Do they seem to understand feelings such as excitement, sadness, or guilt when they have misbehaved? Ask dog owners to compare their experiences with cat owners. Which animal understands more? Do they understand different things? How do they respond?

Have any students communicated with pets other than cats and dogs? How about wild animals?

Regardless of the possibility of communication, remind students that all creatures (even insects and spiders!) are living beings and are worthy of respect.



Sandra the spider helped the children climb up her web. It was easy to climb up the sticky threads. They reached the middle of the web. Corky could not reach them. They were safe, but how could they help Tommy?

Extend the Story

After reading *Tommy and the Giant Cockroach*, ask students to imagine a longer story encountering additional insects and spiders. What other creatures might be included? What kinds of adventures might Tommy and his friends have? Encourage students to let their imaginations run wild!

A few possibilities:

- RK-5's magic allows Kim to look inside a chrysalis while a caterpillar turns into a moth
- Grasshopper Olympics
- Taffy has an encounter with a flea colony
- Tommy learns about aviation while perched on a dragonfly

Students may either write their stories or draw pictures to show what happens. When they are finished, have each share his or her work with the class.

Visual Cues for Emotions

Look at the illustration on page 13. What does it tell us that the words don't? The words on the page tell us that the children reached the middle of the web and were safe from Corky. What do the children's faces and gestures tell us? Explain to students that faces and gestures often denote feelings (emotions). From looking at the picture, we might guess that:

The children might have been scared as they climbed the web.

They weren't sure they were safe from Corky.

They were worried because Tommy was still in danger.

Have students look at other illustrations in *Tommy and the Giant Cockroach* and identify emotions portrayed in the illustrations based on visual cues rather than the text of the story.

Use this exercise as a jumping-off point for discussing visual cues that may indicate how someone is feeling. Students can take turns silently acting out an emotion from the list below and having their classmates guess the emotion. Possible visual cues are listed under each emotion.

Happy

smiling, laughing, fluid or buoyant movements

Sad

frowning, tears, covering face with hands, sitting or standing quietly

Scared

grimacing, tears, shaking, pointing nervously at the source of the fear, tense or agitated movements

Angry

tight-lipped staring, glaring, crying, sharp movements and looks, tense or agitated movements

Extension You can use this exercise to introduce the concept of mime—portraying a mood, character, or action without using speech. Encourage students to take turns miming everyday situations from their lives and having classmates guess what they are miming. Possible ideas include making and eating an ice cream cone, playing catch, brushing teeth, and playing with a pet.

Insects: Friends or Foes?

We usually think of insects in a negative way. Insects feed on our blood, contaminate our homes, eat our crops, and transmit diseases. But without them, we could not exist. They are a fundamental part of our ecosystem. Educate students about some of the many positive functions insects play in our lives, including:

- pollinating (and therefore keeping alive) most of the plant life on Earth
- breaking down organic materials and keeping our soil rich and healthy
- controlling populations of harmful invertebrate species (including other insects)
- producing certain foods, including honey
- manufacturing useful products such as silk and shellac

Although insects are crucial to human survival, they have a right to exist apart from their usefulness to us. They are a precious link in the web of life. Encourage students to gently and safely *remove* insects from “close encounters” instead of killing them.

Why so many insects?

There are approximately one million known species of insects and several more million unnamed or unidentified insect species. That’s a lot of insects!

Why is it that we may see 200 gnats at a time, or 25 mosquitoes, but only four deer or one raccoon? The reason is because of different survival strategies employed by various species. Some species, including most insects, create thousands (or in the case of the honeybee, millions) of offspring. In species that use this strategy, each individual is considered expendable, and although most will be eaten by predators or otherwise die without reproducing, the species will survive because of its sheer numbers.

At the other extreme are species such as elephants, where the norm is the birth of only one offspring at a time. Much greater care is taken to ensure that offspring are well cared for, and consequently each one is much more likely to survive to reproductive age and help their species to survive.

If there were as many elephants as insects in the world, we would have no room to move!



Suddenly, a huge, furry foot trapped Corky’s back legs. Corky was so surprised he let Tommy go. Tommy ran to the web and quickly climbed up to join his friends.

“Look, Taffy has caught Corky,” said Lucy.

“An hour has passed,” said Tommy quietly, “RK-5, please make us big again.”

Did You Know . . . ?

Sharing these fun facts with students can spark curiosity that may lead students to further investigation into the world of insects.

- Mayflies live only a few hours; a queen termite can live 50 years.
- The largest moth, the atlas moth, which lives in southeastern Asia, has a wingspan of up to 12 inches.
- Dragonfly compound eyes can contain up to 30,000 facets.
- If humans could jump proportionately as high as fleas, we would be able to leap 700 feet in the air.
- A male cricket “sings” by scraping together his front wings. A female cricket hears his mating call through an ear, called a tympanum, on each front leg.
- Butterflies and moths often have bold wing patterns to confuse attackers. Some patterns look like big eyes; the 89 butterfly has a black-and-white zebra pattern with the number 89 on each wing.

There was a flash of light and a cloud of blue smoke. When the smoke cleared, they were back to their normal size. Tommy ran to Taffy.

"Thank you, Taffy. You saved me," he said.

Taffy wagged his tail.

Tommy then said to RK-5, "Please promise never to make us small again."

RK-5 didn't reply.



Relationships

This story continues to reveal to us aspects of the children's relationships with each other. They seem to know the value of friendship, family, and the importance of staying together on their adventures. Ask students to name some ways that the children show that they care about each other.

More Relationships

Tommy is rescued by his loyal dog, Taffy. Ask students to share about special relationships they may have with pets. Has anyone been rescued by a pet? Has anyone rescued a pet from a dangerous situation? Has anyone been comforted by a pet when they were not feeling well? Pets can be significant sources of friendship and joy.

Feedback

Remind students that this is the eighth book in a series, and that there will be a new one each month. Ask "How do you like it so far?"

Ask them to write a critical book review of this story or of the series so far. Reviews can be in the form of a written essay, a poster, or a drawing. E-mail your reviews to editor1@learningpage.com for possible inclusion in future Teaching Guides.

Conclusion

Ask students for their feelings and thoughts about this story. Stimulate enthusiasm and anticipation for the next story.

Explain to the students that the story continues. They will find out in the next book where Tommy and his friends are off to in their series of exciting adventures.

When the work with *Tommy and the Giant Cockroach* is completed, keep all the books together in a storage box to be used again in the next school year or with the next group. Or, students could be encouraged to take the books home to share with their families and have for their own libraries.

Write a Letter to RK-5

After reading the story, have students write a letter to RK-5. In the letter, have them list some adventures they would like RK-5's help in going on during their lifetimes. Students should include adventures that are realistically attainable (such as seeing the Grand Canyon or learning to play a musical instrument) and some that are pure imagination (such as swimming across the ocean as a sea turtle). Be sure to have students follow a traditional letter-writing form, with the date, salutation line, closing, and a signature.

